

BIODEGRADABLE POLYMER COMPOSITION

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Abstract of JP9095606

PROBLEM TO BE SOLVED: To obtain a biodegradable polymer composition which mainly comprises a specific poly(lactic acid), has improved elongation at break and shock resistance without adverse effect on its tensile strength and transparency with excellent mold release characteristics, and is useful as a package material.

SOLUTION: This biodegradable polymer composition mainly comprises (A) lactic acid oligomer (suitably comprising L-lactic acid, D-lactic acid or their mixture with a molecular weight distribution from dimer to pentacontamer (50-mer), (B) a thermal stabilizer (suitably lactic acid inorganic salt, for example, sodium lactate, calcium lactate, zinc lactate, lead lactate, barium lactate, aluminum lactate, iron lactate, silver lactate, magnesium lactate, manganese lactate, copper lactate or their mixture) and (C) a mold releasing agent (suitably a silicone oil having viscosity at 25 deg.C ranging from 10-10,000cs). The silicone oil is suitably an alkyl-modified silicone or methylstyryl-modified silicone, in an example, 100 pts.wt. of poly(lactic acid) are mixed with 10-15 pts.wt. of the component A, 2-3 pts.wt. of the component B and 1-2 pts.wt. of the component C.